



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/743,200	12/22/2003	Egidijus Edward Uzgis	RD-26,797-6	4526

7590 11/30/2004

General Electric Company
CRD Patent Docket Rm 4A59
P.O. Box 8, Bldg. K1
Schenectady, NY 12301

EXAMINER

JONES, DAMERON L

ART UNIT	PAPER NUMBER
----------	--------------

1616

DATE MAILED: 11/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/743,200	Applicant(s) UZGIRIS ET AL.	
	Examiner D. L. Jones	Art Unit 1616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 2/12/04; 12/22/03; & 9/3/04.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 5-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 5-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2/12/04</u> . | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 1616

ACKNOWLEDGMENTS

1. The Examiner acknowledges receipt of the transmittal filed 12/22/03 wherein claims 1-4 were canceled and the specification was amended to incorporate the continuing data.

Note: Claims 5-27 are pending.

APPLICANT'S INVENTION

2. Applicant's invention is directed to a method of making extended linear reptating polymers comprising the steps set forth in independent claim 5.

RESPONSE TO APPLICANT'S ELECTION

3. Applicant's election of Group II filed 9/3/04 is acknowledged. The election is viewed as one without traverse since all other claims have been canceled.

112 REJECTIONS

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 7, 10, and 27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 7, line 2: Did Applicant intend to write 'triethylamine' instead of 'tiriethylamine'?

Art Unit: 1616

Claim 10, line 2: Did Applicant intend to write 'hydrobromide' instead of 'bydrobromide'?

Claim 27, line 2: The claim as written is ambiguous because of the phrase 'claim 10.4.'.

DOUBLE PATENTING REJECTIONS

6. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Art Unit: 1616

7. Claims 5-22 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 19-25 of copending Application No. 10/793,376. Although the conflicting claims are not identical, they are not patentably distinct from each other because both sets of claims are directed to a polyamino acid in combination with a polyamino acetic acid and an alkylchloroformate. The claims differ in that those of the instant invention are directed to a specific poly(amino acid) [polylysine] and polyaminoacetic acid [DTPA] while 10/793,376 reads on any polyamino acid and polemic acetic acid. Thus, a skilled practitioner in the art would recognize that 10/793,376 encompasses the instant invention.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

103 REJECTIONS

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 5-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sieving et al, Bioconjugate Chem., 1990, Vol. 1, No. 1, pages 65-71.

Sieving et al disclose the synthesis of DTPA mixed anhydride and the synthesis of Polylysine-DTPA (see entire document, especially, page 66, column 2, the fifth and sixth complete paragraphs). The DTPA mixed anhydride is generated from combining DTPA, acetonitrile, and triethylamine and cooling the mixture to -30 degrees Celsius. Then isobutyl chloroformate is added to the cooled solution (**Note**: this solution is consistent with what is designated as Applicant's second solution). The synthesis of polylysine-DTPA comprises adding poly-L-lysine hydrobromide and sodium carbonated to the mixed anhydride previously made and cooling the mixture in an ice bath. The resulting mixture is warmed to remove the majority of acetonitrile. The residual low molecular weight components are removed by gel filtration. Next lyophilization of a white, amorphous solid occurs. The solid is the polylysine-DTPA complex. While Sieving et al disclose a method of making a reptating polymer, the reference fails to specifically state that the second solution is cooled below -35 degrees Celsius and that the first solution is cooled to about zero degrees Celsius.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Sieving et al and cool the second solution below -35 degrees Celsius and cool the first solution to about zero degrees Celsius for the reasons below. First, since the instant invention states that the second solution is cooled below about -35 degrees Celsius and the prior art disclose cooling their solution to -30 degrees Celsius. Thus, since the phrase 'about -35' encompasses values above -35 and below -35 (**Note**: 'about' is a relative term), the cited prior art temperature of -30 degrees Celsius is encompassed in 'about 35 degrees Celsius'.

Art Unit: 1616

The instant invention differs from the prior art in that the solution designated as Applicant's first solution is cooled to a temperature of about zero degrees Celsius. The prior art discloses that their solution was cooled in an ice bath. Thus, the skilled practitioner would recognize that the prior art solution is cooled to about zero degrees Celsius as well.

It is note that, for example, Applicant's claims 12 and 13 which depend on independent claim 5 read 'about -43 degrees Celsius' and 'about -45 degrees Celsius', respectively. Independent claim 5 reads 'about -35 degrees Celsius'. Thus, Applicant's temperature difference between the dependent and independent claims varies 8 to 10 degrees Celsius. As a result, Applicant's phrase 'about -35 degrees Celsius' may be interpreted to encompass temperature ranges of approximately $\pm 8 - 10$ degrees Celsius which would encompass -30 degrees Celsius as taught by the prior art.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to D. L. Jones whose telephone number is (571) 272-0617. The examiner can normally be reached on Mon.-Fri., 6:45 a.m. - 3:15 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Kunz can be reached on (571) 272-0887. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1616

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "D. L. Jones", is positioned above the printed name.

D. L. Jones
Primary Examiner
Art Unit 1616

November 24, 2004